

# Emerson™ Wireless SmartPower™ Solutions

## Blue Power Module



- Double the lifetime of the Black Power Module, up to 10 years
- Replacement for Black Power Module in energy intensive applications
- Intrinsically safe design enables routine maintenance in hazardous areas

# Blue Power Module

**Hazardous Location Compatibility (consult factory if requested certificate is not listed):**

- AMS 9420 Wireless Vibration Transmitter (USA, Canada, ATEX, IECEx)
- Rosemount 3051S Wireless Pressure Transmitter (USA, Canada, ATEX, IECEx)
- Rosemount 3051SMV Wireless Pressure Transmitter (USA, Canada, ATEX, IECEx)
- Rosemount 648 Wireless Temperature Transmitter (USA, Canada, ATEX, IECEx)
- Rosemount 3308A Wireless Guided Wave Radar (USA, Canada, ATEX, IECEx)
- Rosemount 2160 Wireless Level Switch (Consult factory)
- Rosemount 928 Wireless Gas Monitor (USA, Canada, ATEX, IECEx)
- Rosemount 702 Wireless Discrete Transmitter (USA, Canada, ATEX, IECEx)
- Rosemount 702 Wireless Plunger Arrival Transmitter (USA, Canada, ATEX, IECEx)
- Rosemount 705 Wireless Totalizing Transmitter (Consult factory)

**Intrinsically safe power solution**

- SmartPower™ Modules can be changed in hazardous areas
- No need to remove transmitter from process to change Power Module

**Predictable life**

- Life expectancies specified under installed conditions
- Up to 10 year life depending on update rate

**Easy maintenance**

- Low level alerts for easy planning of replacements
- Keyed connections for easy replacement and fail-safe connection

**Safe, robust design**

- Short circuit protection
- No special training required
- Designed for harsh environments

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## Ordering Information

Specification and selection of product materials, options, or components must be made by the purchaser of the equipment. See page 3 for more information on material selection.

**Table 1: SmartPower Solutions Blue Power Module Ordering Information**

The Emerson Wireless Blue Power Module is only available as a spare part at this time. An extended cover is required to accommodate the larger module size.

Spare part	Product description
A0701PBU	Emerson Wireless SmartPower Solutions Blue Power Module
00753-9020-1001	Extended Power Module Cover, Aluminum
00753-9020-1002	Extended Power Module Cover, SST

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# Specifications

## Functional specifications

### Life expectancy

Up to 10-year life at 1-minute update rate. See Power Module Life Estimator for more information.

### Humidity limits

0 to 100% relative humidity.

## Physical specifications

### Material selection

Emerson provides a variety of Rosemount products with various product options and configurations including materials of construction that can be expected to perform well in a wide range of applications. The Rosemount product information presented is intended as a guide for the purchaser to make an appropriate selection for the application. It is the purchaser's sole responsibility to make a careful analysis of all process parameters (such as all chemical components, temperature, pressure, flow rate, abrasives, contaminants, etc.), when specifying product, materials, options, and components for the particular application. Emerson Automation Solutions is not in a position to evaluate or guarantee the compatibility of the process fluid or other process parameters with the product, options, configuration, or materials of construction selected.

### Electrical connections

Emerson SmartPower solutions are designed for use with various Smart Wireless devices. See list on page 2 for compatible device list.

### Rated voltage

Blue Power Module: 7.2V

### Materials of constructions

Lithium-thionyl chloride primary cell with a polybutylene terephthalate (PBT) enclosure.

### Weight

Blue Power Module: 0.89lbs (405g)

## Power Module life

Power Module life for a given wireless transmitter is mainly a function of the wireless update rate. Faster wireless updates lead to lower Power Module life. Power Module life is also impacted by extreme temperature and wireless network conditions.

To better estimate Power Module life for a wireless transmitter in your network, visit the online [Power Module life estimator](#).

## Performance specifications

### Electromagnetic compatibility (EMC)

Meets all relevant requirements of EN61326-1; 2006; EN 61326-2-3;2006.

**Vibration effect**

No effect when tested per the requirements of IEC 60770-1.

**Temperature limits**

Operating limit	Storage limit
-40 to 185 °F (-40 to 85 °C)	-40 to 185 °F (-40 to 85 °C)

## Product Approvals

### European Directive Information

The most recent version of the EC Declaration of Conformity can be found at [www.emerson.com/ams](http://www.emerson.com/ams).

## Ordinary Location Certification for North American Approvals

The Power Module has been examined and tested to determine that the design meets the basic electrical, mechanical, and fire protection requirements.

## Hazardous Location Certification

### US Canada



US/Canada Certificate 70051230

Marking: Ex ia IIC T4 Ga; Class I, Zone 0, AEx ia IIC T4 Ga; Class I, Division 1, Groups A, B, C, and D

Ta = -55°C to +85°C

### Europe



Europe Certificate Sira 15ATEX2332X Marking: II 1G, Ex ia IIC T4 Ga

### International



International Certificate IECEx CSA 15.0045X

Marking: Ex ia IIC T4 Ga

Ta = -55°C to +85°C

Refer to installation drawing D25686 and entity parameters:

$U_0/V_{oc} = 7.8V$

$I_0/I_{sc} = 2.16A$

$P_0 = 0.83W$

$C_0/C_a = 3.0\mu F$

$L_0/L_a = 9.4\mu H$

## Compatibility

The Blue Power Module has been certified intrinsically safe as indicated above; however, always refer to the individual certification requirements for each product to determine whether it is suitable for installation and in which environments.



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